

somewhat smaller than the rest of the body, and inserted as it were within it. Miescher was able to observe on these worms the ease with which, by means of their hooked proboscis, they pierce into and bury themselves in the different intestines of the fish without the least injury to them; he was therefore justified in concluding that the *Tetrarrhynchi* met with in the pericardial cavity had got into it from the ventral cavity. Miescher suspects that the *Tetrarrhynchi* were on their way to quit the fish through the membranaceous hind wall of the gill-cavity, behind which they had already collected in considerable number. Miescher further suspects that these *Tetrarrhynchi*, having got into the sea-water, search for other animals as an abode; this seemed to him very probable, as he subsequently often met with similar *Tetrarrhynchi* at Nice, in the mantles of *Loligo sagittata*, which were filled with water. I likewise found at Pola quite similar sexless *Tetrarrhynchi*, provided with an appendage inserted into the body between the ventral folds of *Sepia officinalis*, as if they had bored their way from without in order to find a new habitat. Miescher lastly questions whether the sexless *Tetrarrhynchi* might not subsequently change into *Bothriocephali* of the group furnished with hooks, as the *Bothriocephali* belonging to this group perfectly resemble in head and neck a *Tetrarrhynchus*. In favour of the probability of this metamorphosis, Miescher adduces the following observation: a *Notidanus griseus*, just killed at Nice, contained in the cavity of the spiral intestine a great number of *Bothriocephalus corollatus*, Rud.: in the articulations of this tape-worm the male and female genitalia were distinctly developed; beneath the membranes of the same intestine there was found, inclosed in a thick-walled cyst of the size of a pea, a worm, to the *Tetrarrhynchus* head of which two *Tenia* joints, without developed genitalia, were affixed: without doubt this undeveloped worm was connected with the *Bothriocephalus corollatus* of the intestinal cavity.

Creplin\* found, like Miescher, similar bodies provided with a tail: on the peritoneum of *Esox Belone*, he states his having seen a pore at its thick end, agreeing in this respect with Leblond, but he did not any more than myself notice a worm, but only a white granular mass in these sacs. Creplin's observation, that *Esox Belone* contains in the cavity of its body a remarkable parasite, resembling *Tetr. attenuatus*, two inches in length, is however interesting.

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XXII.—*Description of a new Species of Poa.* By RICHARD PARNELL, M.D., F.R.S.E., &c.†

[With a Plate.]

THE *Poa* about to be described was gathered by Dr. Balfour, Professor of Botany in the University of Glasgow, on a mountain called Ben Voirlich, near the head of Loch Lomond, during

\* Encyclopädie von Ersch und Gruber, p. 294.

† The description and drawings are taken from a work on Scottish Grasses about to be published by Dr. Parnell.—EDIT.

an excursion with his pupils in July last. Specimens of it were also collected by him in August last, on the mountains of Clova in Forfarshire. The plant grows on micaceous soil, at an elevation varying from 2000 to 2500 feet above the level of the sea. It has been named in honour of its discoverer, and the following are the characters by which it is distinguished:—

POA BALFOURI, Parnell. St. John's Meadow-grass.

*Specific Characters.*—Florets slightly webbed. Ligule prominent, obtuse. Upper leaf nearly as long as its sheath. Outer palea five-ribbed. Stem compressed.

*Description.*—It grows from three to fifteen inches high: the root is perennial, creeping. *Stem* erect, compressed, furnished with a few minute spiculæ, with their points directed upwards, producing a slight roughness to the touch; bearing three or four leaves, with scarcely smooth sheaths; the upper sheath a very little longer than its leaf, crowned with a prominent obtuse ligule (Pl. V. fig. 4.); second sheath shorter than its leaf, covering the upper joint. *Joints* three, situated on the lowest third of the stem. *Leaves* confined to the lower part, leaving nearly two-thirds of the stem naked; all the leaves of about equal length, short, lanceolate, roughest on the upper surface and edges, smooth below. *Inflorescence*, a simple or compound panicle. *Panicle* erect, from one to three inches long, spreading when luxuriant; branches slender, rough, the lower ones mostly in pairs. *Spikelets* erect, ovate, of three awnless florets, the summit of the lowermost floret on a level with the apex of the large glume of the calyx; the three or four uppermost spikelets arising from the rachis, the lower ones on lateral branches. *Calyx* of two unequal acute glumes (fig. 1.), three-ribbed, the dorsal rib minutely toothed on the upper third, margins membranous. *Florets* of two paleæ (fig. 2.). The *outer palea* of lowermost floret equal in length to the large glume of the calyx, five-ribbed; the rib on each side of the dorsal rib not hairy, and rather indistinct (unless the palea be held between the lens and light); lower half of the dorsal and marginal ribs hairy; base of the two lowermost florets furnished with three or four long, silky, convoluted hairs, which seem but slightly attached to the calyx. *Inner palea* about equal in length to the outer palea, with two green marginal ribs minutely fringed. *Pedicel* of second floret slightly hairy. *Filaments* three. *Anthers* notched at each extremity. *Ovary* obovate. *Styles* two, distinct. *Stipules* feathery. *Scales* acute, notched (Pl. V. fig. 5.).

Dr. Balfour collected two varieties of the grass, one, *var. rigida*, short and stout, from 3 to 5 inches high, with a short

simple panicle of few spikelets; and the other, *var. extensa*, tall and slender, from 8 to 12 inches in height, with a simple panicle of few spikelets.

This grass is closely allied to *Poa nemoralis*, but differs from it in the *ligule* of the upper sheath being prominent; *upper leaf* scarcely as long as its sheath; all the *joints* situated on the lower third of the stem, and covered by the sheaths; *stem* slightly roughish: whereas in *P. nemoralis* the *ligule* is very short; *upper leaf* as long, often longer than its sheath; *upper joint* situated not below the middle of the stem, and not covered by the second sheath; *stem* smooth.

From *Poa montana*\* it differs in the *florets* being webbed; *upper joint* situated on the lower third of the stem; *lower floret* equal in length to the large glume of the calyx: whereas in *P. montana* the *florets* are not in the slightest degree webbed; *upper joint* situated about half-way up the stem; *lower floret* shorter than the large glume; *panicle* longer, more slender, of fewer spikelets on longer foot-stalks; *leaves* more taper-pointed.

From *Poa polynoda*†, Parn., it differs in the *florets* being webbed; *joints* not exceeding three in number, situated on the lower third of the stem; *upper joint* covered by the second sheath: whereas in *P. polynoda* the *florets* are not webbed; *joints* six or seven in number; *upper joint* situated above the middle of the stem, not covered by the second sheath.

From *Poa cæsia* it differs in the *florets* being webbed; *lower floret* equal in length to the large glume of the calyx: whereas in *P. cæsia* the *florets* are not webbed, and the *lower floret* is longer than the large glume of the calyx; the *spikelets* are larger, and the glumes of the calyx nearly equal.

From *Poa compressa* it differs in the *outer palea* being five-ribbed; *spikelets* of three *florets*; *joints* three, confined to the lower third of the stem: whereas in *P. compressa* the *outer palea* is three-ribbed; *spikelets* of five to seven *florets*; *joints* usually five, the upper one situated about the middle of the stem.

From *Poa pratensis* it differs in the *florets* being but slightly webbed; *stem* very much compressed and slightly roughish to the touch; *upper leaf* a very little shorter than its sheath; *spikelets* of three *florets*; whereas in *P. pratensis* the *florets* are copiously webbed, suspending the calyx by their silky hairs; *stem* smooth and round (except in the *var. planiculmis*, in which the stem is slightly compressed); *upper leaf* much shorter than its sheath; *spikelets* usually of five *florets*.

\* This species was found on Ben Lawers by Dr. Greville.

† This species is described in Dr. Parnell's work on Scottish Grasses.



The Plate represents *Poa Balfouri*, Parnell, with its variety *rigida*.

## PLATE V.

- Fig. 1. Glumes of calyx, } magnified.  
 — 2. Paleæ of a floret, }  
 — 3. Spikelet, }  
 — 4. Ligule with leaf and part of sheath, } natural size.  
 — 5. Stamens, styles, ovary and scales, }

XXIII.—*Information respecting Scientific Travellers.*

MR. FORBES.

A letter from Mr. Spratt, published in Woolmer's Exeter Gazette, will interest our readers, as giving some particulars relative to our much-esteemed friend Mr. Forbes :—

“ I am happy in being able to announce my arrival at the ship, after an absence of nearly four months, most of which was spent in making a tour through ancient Lycia. Mr. Forbes and self parted from our fellow-traveller, the Rev. Mr. Daniell, at Rhodes, who proceeded on to Athens, by way of Smyrna. We had a tedious passage, in a small country-boat, from Rhodes to Syra, of nine days. Poor Forbes, the naturalist, was taken ill on the way, which I soon perceived was the country fever, and he daily got worse until our arrival at Syra, being without medicine or medical advice. His condition was very miserable, and mine, from mental suffering on his account, was nearly as bad. We at length arrived at Syra, in which port I found one of our little tenders, and, through the Consul's exertions, obtained leave from the quarantine department to spend our time in quarantine on board of her. I set sail immediately for our ship, the Beacon, at this place—Paros; our assistant-surgeon, Mr. Harvey, has joined us to take care of poor Forbes, who is now in an improving condition, but has not taken food for thirteen days. I am myself, thank God, in most excellent health, and am much pleased with our tour. This is certainly the most picturesque country I ever saw, and my companions,—who are better judges, from having travelled over the continent,—say that it is not equalled anywhere in Europe. Its highest mountains are 10,000 feet high—the country fertile in parts, and capable of being made a paradise if sufficiently populous. It may be thus described to you for a general idea of its geographical features. Three large maritime valleys forming its south, east and west districts, the largest of which is Xanthus; and in its central and northern divisions extensive and fertile plains and valleys, which are from 400 to 500 feet above the sea. These are all delightfully watered with numerous streams and rivulets, and studded with small villages and towns. Its climate is that of England, though less humid, and its inhabitants Turks, who treat strangers with the greatest civilities and kindness. We have lived in their homes, and travelled under their guidance, and found ourselves at all times kindly and honestly dealt with. During the depth of winter these uplands are